

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-63 (Cancelled).

64. (Currently Amended) A ~~variant~~ human hepatocyte growth factor (HGF) which is incapable of binding a heparan sulphate proteoglycan but which binds to the HGF receptor, wherein a positively-charged amino acid residue in the hairpin loop structure of wild-type human HGF, which structure is set forth in SEQ ID NO:3, has been replaced with an amino acid residue with a negative charge.

65. (Currently Amended) A The ~~variant~~ human hepatocyte growth factor (HGF) according to Claim 64 wherein at least amino acid residue R4 of SEQ ID NO:3 ~~R73 of SEQ ID NO:2~~ has been replaced by an amino acid residue with a negative charge.

66. (Currently Amended) A The ~~variant~~ human hepatocyte growth factor (HGF) according to Claim 64 wherein at least amino acid residue R7 of SEQ ID NO:3 ~~R76 of SEQ ID NO:2~~ has been replaced by an amino acid residue with a negative charge.

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

67. (Currently Amended) ~~A~~ The variant human hepatocyte growth factor (HGF) according to Claim 64 wherein both amino acid residues R4 and R7 of SEQ ID NO:3 ~~R73 and R76 of SEQ ID NO:2~~ have been replaced independently with an amino acid residue with a negative charge.

68. (Currently Amended) ~~A~~ The variant human hepatocyte growth factor (HGF) according to Claim 64 comprising amino acid residue replacements R4E R73E and R7E R76E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

69. (Currently Amended) ~~A~~ The variant human hepatocyte growth factor (HGF) according to Claim 64 comprising amino acid residue replacements R4E, R7E R73E, R76E and R24E R93E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

70. (Currently Amended) ~~A~~ The variant human hepatocyte growth factor (HGF) according to Claim 64 comprising amino acid residue replacements R4E, R7E R73E, R76E and K9E R78E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

71. (Currently Amended) ~~A~~ The variant human hepatocyte growth factor (HGF) according to Claim 64 consisting of human HGF with amino acid replacements R4E R73E and R7E R76E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

72. (Currently Amended) A ~~The variant~~ human hepatocyte growth factor (HGF) according to Claim 64 consisting of human HGF with amino acid replacements R4E, R7E R73E, R76E and R24E R93E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

73. (Currently Amended) A ~~The variant~~ human hepatocyte growth factor (HGF) according to Claim 64 consisting of human HGF with amino acid replacements R4E, R7E R73E, R76E and K9E K78E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

74. (Currently Amended) A variant human hepatocyte growth factor (HGF) which is incapable of binding heparan sulphate proteoglycan but which binds to the HGF receptor, wherein a positively-charged amino acid residue in the hairpin loop structure of wild-type HGF, which structure is set forth in SEQ ID NO:3, has been replaced with an amino acid residue with a negative charge, provided that the ~~variant~~ said human HGF is not a variant of human HGF in which the replacements (a) R4E, R7E R73E, R76E and R24E R93E or (b) R4E R73E and R7E R76E or (c) K22E, R24E K91E, R93E and K25E K94E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~, have been made.

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

75. (Currently Amended) A ~~The~~ variant human hepatocyte growth factor (HGF) according to Claim 74 wherein at least amino acid residue R4 R73 of SEQ ID NO:3 ~~SEQ ID NO:2~~ has been replaced by an amino acid residue with a negative charge.

76. (Currently Amended) A ~~The~~ variant human hepatocyte growth factor (HGF) according to Claim 74 wherein at least amino acid residue R7 R76 of SEQ ID NO:3 ~~SEQ ID NO:2~~ has been replaced by an amino acid residue with a negative charge.

77. (Currently Amended) A ~~The~~ variant human hepatocyte growth factor (HGF) according to Claim 74 wherein both amino acid residues R4 R73 and R7 R76 of SEQ ID NO:3 ~~SEQ ID NO:2~~ have been replaced independently with an amino acid residue with a negative charge.

78. (Currently Amended) A variant human hepatocyte growth factor (HGF) comprising amino acid residue replacements R4E R73E and R7E R76E; or amino acid residue replacements R4E, R7E R73E, R76E and R24E R93E; or amino acid residue replacements R4E, R7E R73E, R76E and K9E R78E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

79. (Currently Amended) A variant human hepatocyte growth factor (HGF) consisting of human HGF with amino acid residue replacements R4E R73E and R7E

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

~~R76E~~, or R4E, R7E ~~R73E, R76E~~ and R24E R93E, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

80. (Withdrawn and Currently Amended) A method of inducing DNA synthesis in a cell comprising providing to the cell a ~~variant~~ human hepatocyte growth factor (HGF) which is incapable of binding a heparan sulphate proteoglycan but which binds to the HGF receptor, wherein a positively-charged amino acid residue in the hairpin loop structure of wild-type HGF, which structure is set forth in SEQ ID NO:3, has been replaced with an amino acid residue with a negative charge.

81. (Withdrawn and Currently Amended) A method of inducing dissociation and scattering of cells in a cell population, the method comprising providing to the cell population a ~~variant~~ human hepatocyte growth factor (HGF) which is incapable of binding a heparan sulphate proteoglycan but which binds to the HGF receptor, wherein a positively-charged amino acid residue in the hairpin loop structure of wild-type human HGF, which structure is set forth in SEQ ID NO:3, has been replaced with an amino acid residue with a negative charge.

82. (Withdrawn and Currently Amended) A The method according to Claim 80 or 81 wherein at least amino acid residue R4 R73 of SEQ ID NO:3 ~~SEQ ID NO:2~~ has been

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

replaced by an amino acid residue with a negative charge in the ~~variant~~ human hepatocyte growth factor (HGF).

83. (Withdrawn and Currently Amended) ~~A~~ The method according to Claim 80 or 81 wherein at least amino acid residue R7 ~~R76~~ of SEQ ID NO:3 ~~SEQ ID NO:2~~ has been replaced by an amino acid residue with a negative charge in the ~~variant~~ human hepatocyte growth factor (HGF).

84. (Withdrawn and Currently Amended) ~~A~~ The method according to Claim 80 or 81 wherein both amino acid residues R4 ~~R73~~ and R7 ~~R76~~ of SEQ ID NO:3 ~~SEQ ID NO:2~~ have been replaced independently by an amino acid residue with a negative charge in the ~~variant~~ human hepatocyte growth factor (HGF).

85. (Withdrawn and Currently Amended) ~~A~~ The method according to Claim 80 or 81 wherein the ~~variant~~ human hepatocyte growth factor (HGF) comprises amino acid residue replacements R4E ~~R73E~~ and R7E ~~R76E~~; R4E, R7E ~~R73E, R76E~~ and R24E ~~R93E~~; or R4E, R7E ~~R73E, R76E~~ and R9E ~~R78E~~, numbered in accordance with SEQ ID NO:3 ~~SEQ ID NO:2~~.

86. (Withdrawn and Currently Amended) ~~A~~ The method according to Claim 80 or 81 wherein the ~~variant~~ human hepatocyte growth factor (HGF) c nsists of human HGF

GHERARDI et al
Appl. No. 09/423,516
April 9, 2004

with amino acid residue replacements R4E R73E and R7E R76E, or amino acid residue replacements R4E, R7E R73E, R76E and R24E R93E, numbered in accordance with SEQ ID NO:3 SEQ ID NO:2.